*Discussion*.– This study compiles valuable data which can be used to identify and target the ULS patients most likely to benefit from BoNT-A treatment.

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P063-e

## Gait study in hemiplegic patients: Role of spasticity on baropodometric parameters

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*Keywords:* Hemiparetic; Gait analysis; Spasticity, Nerve block; COP

A study was conducted to evaluate the effect of treatment on triceps surae spasticity in hemiparetic patients using a quantitative and reproducible parameter: the anterior-posterior path length of the center of pressure (COP). The F-Scan system used the embedded footings to analyze the path of the COP and the plantar pressure during walking.

COP parameters have a good repeatability in hemiparetic patients [1].

The population consisted of 10 hemiparetic patients (six left, four right), with disturbing spasticity of the triceps surae during ambulation, able to walk alone with or without technical assistance (FAC functional scale between 3 and 5). After clinical examination, walking study was achieved at own speed (with or without technical assistance), before and after an anesthesic block of the posterior tibial nerve. The session comprised of baropodometric, spatiotemporal recordings, and a videographic survey.

The main variable analyzed was the change of anterior-posterior path length of the COP (AP) in hemiparetic side after completion of the nerve block.

According to literature, a significant decrease in the AP in paretic side compared to the non-paretic side was found before the nerve block [2]. AP increased significantly after completion of the nerve block (112 vs 99 mm, $P = 0.03$).

In conclusion, we find a significant variation of a quantitative variable of gait in hemiparetic patients after abolition of spasticity.

*References*

[1] Valentini FA, Granger B, Hennebelle DS, Eythrib N, Robain G. Repeatability and variability of baropodometric and spatiotemporal gait parameters – results in healthy subjects and in stroke patients. Neurophysiol Clin 2011;41(4):181–9 [Epub 2011 September 13].

[2] Robain G, Valentini F, Renard-Deniel S, Chennevelle JM, Piera JB. Abaropodometric parameter to analyze the gait of hemiparetic patients: the path of center of pressure. Ann Readapt Med Phys 2006;49(8):609–13 [Epub 2006 May 26].

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P064-e

## Intrathecal baclofen for spasticity management: A comparative analysis of complications in a series of 88 pumps for adults and children

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*Keywords:* Spasticity; Baclofen; Complication; Cerebral palsy

*Objective*.– To examine differences in complication rates between children and adults treated by intrathecal baclofen.

*Material and method*.– Retrospective chart review of 73 patients (adults and children; 88 pumps) with a diagnosis of severe spasticity requiring intrathecal baclofen therapy.

*Results*.– Complication rates by category were as follows: related to human error: 8%, related to baclofen: 11%, related to surgery: 19% and related to the implantable device: 27%. Complications were more frequent in adults than in children, except for complications related to surgery. The complication rate related to the implantable device was higher in ambulatory patients. The complication rates related to surgery and the implantable device decreased during the course of the study.

*Conclusions*.– The overall complication rate observed in our series is comparable to that reported in the literature and, in contrast with the literature, was not higher in children than in adults. Only complications related to the surgical procedure were slightly more common in children. Baclofen pump implantation in children is therefore a safe procedure.

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P065-e

## The contribution of anaesthetic blocks in the evaluation of spastic patients

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*Keywords:* Spasticity; Assessment; Anesthetic blocks

*Introduction*.– The anesthetic blocks are currently in the arsenal of diagnostic and therapeutic motor disorders associated with spasticity.

The aim of our study is to clarify the interest of the anesthetic block in patient assessment spastic.

*Patients and methods*.– Twenty patients hospitalized in the physical medicine and functional rehabilitation were selected over a period of 2 years (since January 2010) and who received anesthetic block during their hospitalization. These were patients aged between 13 and 72 years (mean age 43 years) with vascular hemiplegia in 12 cases (60%), cerebral palsy in three cases (15%), spinal cord injury in three cases (15%), head trauma in 1 case (5%) and a hereditary disease in one case (5%).

The anesthetic blocks were performed by specific needles and a pacemaker, respecting the location techniques. The anaesthetic used was mainly 2% non-adrenalized etidocaine (Xylocaïne®) An analytical assessment of spasticity by the Ashworth score and functional walking was performed for each patient.

*Results*.– Twenty anesthetic blocks were performed. The injected sites were dominated by the soleus nerve (48%), the median nerve (33%) and the posterior tibial nerve (11%).

We noted an Ashworth score gain of about 1 to 2 points, a gain of 13° joint and an average improvement of gait in 11 patients (64%).

Fifteen patients (75%) benefited from an injection of botulinum toxin and one patient was operated (neurotomy).

*Conclusion*.– The anesthetic blocks currently represent a simple and effective approach with a dual interest in diagnosis and prognosis.

They are shown to reproduce the transient effect expected a more sustainable and therefore more costly by providing an effective local treatment of spasticity.

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P066-e

## Extensor truncal dystonia with spondylolysis: Interest of botulinum toxin in the spinal muscles for pain relief

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*Keywords:* Truncal dystonia; Spondylolysis; Low-back pain; Botulinum toxin

*Introduction*.– Primary and secondary dystonia with truncal dystonia are often associated with spinal involvement as low-back pain. Interest of botulinum toxin is well described in literature for cervical dystonia but less for truncal dystonia. We report the case of a patient who received local botulinum toxin